CLEAN COPY OF AMENDED CLAIMS

1.   A computer model for describing a performance of a segmented transmission line having a plurality of segments, each segment having a transfer function, comprising:

(a)   means for storing at least one characteristic value the transfer function of a respective segment of the segmented transmission line;

(b)   means for storing information relating to at least one algorithm, said algorithm being for determining the effect of a respective characteristic value and sequence of transmission line segments on a performance of the overall segmented transmission line; and

(c)   means for adjusting a characteristic value,

whereby a set of characteristic values is defined for respective transmission line segments, having an optimized performance in view of the at least one algorithm.

8.   The model according to claim 1, wherein the respective characteristic values are non-incrementally distributed across a range.

9.   The model according to claim 1, wherein the respective characteristic values are non-monotonically distributed across a range.

17.   The method according to claim 10, wherein a variation in respective segment characteristics is distributed non-incrementally.

18.   The method according to claim 10, wherein a variation in respective segment characteristics is distributed non-monotonically.

25.   The system according to claim 22, wherein the segmented transmission line comprises an air-spaced coaxial transmission line adapted for transmitting an RF signal, the characteristic value being a length of a respective transmission line segment, the optimized respective characteristic values being non-incrementally and non-monotonically distributed across a range.